

IDAHO

DEPARTMENT OF FISH AND GAME

Jerry M. Conley, Director

HENRYS LAKE HATCHERY

Annual Report



1 October 1982 - 30 September 1983

by
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Fish Hatchery Superintendent I

November 1984

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HENRYS LAKE HATCHERY

ABSTRACT

The egg take at Henrys Lake for 1983 was 3,662,093 cutthroat eggs. Rainbow milt was crossed with 317,708 of these cutthroat eggs to produce hybrids.

No soft-shell disease was noted during spawning this year. This resulted in a good average eye-up and a relatively good hatch.

Cutthroat eggs were shipped to Ashton, Mackay and McCall hatcheries to be returned in the fall as three to four inch fish. The cutthroat x rainbow eggs went to Grace Hatchery.

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OBJECTIVES

The objectives of Henrys Lake Hatchery are:

1. To take and ship enough cutthroat eggs to assure a plant of approximately 2,000,000 cutthroat fingerling into Henrys Lake in the fall.
2. To take and ship enough brook trout eggs to assure a plant of approximately 100,000 brook trout fingerling into Henrys Lake in the fall.
3. To hold and rear the remaining cutthroat eggs, after shipments to the Ashton and Mackay hatcheries, to as large a size as possible by fall planting time.
4. To take enough cutthroat eggs to cross with rainbow milt to form hybrids and assure a plant in the fall of approximately 250,000 fingerling.
5. To scatter plant about half of the fish going back into the lake and plant the rest down through the ladder to assure a spawning run that will return to the hatchery facility.

INTRODUCTION

Henrys Lake Hatchery is located in Region 6 along Highway 87 approximately 55 miles north of Ashton in Fremont County. The hatchery was established in 1922. It now consists of two residences and a large building housing hatchery facilities, an office, garage and storage area. A fish ladder extends from a spawning house to the lake.

The hatchery gets about one cfs of gravity fed spring water at a temperature of 45°F. The spring is shared with a private residence across the highway from the hatchery site.

Facilities include ten stacks of Heath incubators containing 16 trays each. The eggs are contained in the incubators until they hatch and reach the swim-up stage.

There are three vats inside the hatchery which can be divided in half. The fish are started on feed in these vats.

Outside there is an earthen pond used for rearing cutthroat fry prior to release. Fish are transferred to this pond as soon as the weather permits.

The temperature is cold enough that growth is slowed considerably. In the summer solar heat warms the water in the dirt pond to around 53°F, which improves growth, but for only a period of two to three months.

FISH PRODUCTION

The numbers of adult cutthroat returning to the hatchery was up over the previous year. There were 4,058 fish, with 62% being males. The numbers of hybrids were down from previous years with 437 total fish returning to the hatchery. Approximately 55% of these were males. The rainbow trout that were used for the hybrid program were males taken from the Snake River below the Ashton power dam by electro-fishing.

The 1983 eggtake for cutthroat was down from 1982 by approximately 1,000,000 eggs. This was due to the higher percentage of males in this year's run. There were 3,662,093 cutthroat eggs taken, with 318,708 crossed with rainbow milt to produce rainbow x cutthroat hybrids. Hybrid eggs taken and crossed with cutthroat milt amounted to 44,226.

There were no diseases encountered, either with the eggs or resulting fry, at Henrys Lake Hatchery this season.

Table 1
SPAWN REPORT - 1983

Species	Total eggs	Eye-up %	Total eyed eggs
CTT	3,343,389	89	2,982,400
CTT x RBT	318,708	88	281,502
HYB x CTT	44,226	85	37,908

Table 2
EGG SHIPMENTS - 1983

Species	Ashton	Mackay	Grace	McCall
CTT	482,478	1,956,472		202,176
CTT x RBT	-	-	281,502	
HYB x CTT	37,908	-		

The remaining 344,274 cutthroat eggs were kept, hatched and reared at Henrys Lake Hatchery.

An approximate total of 320,034 cutthroat fry were planted in Henrys Lake from Henrys Lake Hatchery. They averaged 746 fish per pound and totaled 429 pounds.

Two methods of planting were used again this year. The traditional method, in which approximately 700,000 fish were planted through the ladder, to return to the hatchery. The other method was by truck at various points around the lake.

Table 3
Fish Plants Into Henrys Lake - 1983

Species	Total numbers	Average fish per pound	Total pounds
CTT	2,178,533	228.50	9,534
CTT x RBT	228,510	359.29	636
Brook	21,602	86.41	250

HATCHERY IMPROVEMENTS

Improvements to the site this year included new carpet in the living room and one bedroom and vinyl floor covering in kitchen and bathroom of residence #1.

Capital outlay items were for a 1983 Dodge 3/4-ton four-wheel-drive pickup and a new radio for above.

MISCELLANEOUS ACTIVITIES

During spawning season data was collected by the spawntaker as to the number of fish, sex, species and 10% size sample of all fish returning to the hatchery facility.

The latter part of the summer to the end of fishing season, time was spent assisting research with data collection on Henrys Lake. This involved angler counts and interviews.

Time was also spent assisting Conservation Officer Bruce Penske with enforcement work and animal salvage during the controlled and general hunting seasons.

COMMENTS

Henrys Lake Hatchery had a lot of visitors again during the spawning operation and throughout the summer as well as into the fall.

The catch rate was up significantly from the past few years. The anglers interviewed were pleased that they could once again catch fish out of Henrys Lake.

STAFF

The staff at Henrys Lake Hatchery for 1983 consisted of:

Fish Hatchery Superintendent I	Gene McPherson
Fish Hatchery Superintendent I	Roland Warren